DATE: April 30, 2003

TO: John Eliasson, Wastewater Management Specialist

Wastewater Management Program, Department of Health

FROM: Scott Berbells, Public Health Advisor

Food Safety & Shellfish, Department of Health

RE: DATA PERTAINING TO OSS IMPACTS RELATED TO COMMERCIAL

SHELLFISH AREA DOWNGRADES

As requested, I would like to provide you with the following information related to shellfish areas impacted by on-site sewage systems. I've categorized the impacted areas into Large Areas and Small Areas. Large Areas include those portions of the shoreline for which numerous on-site sewage system failure have occurred while the Small Areas include those closures typically created around one failing OSS. I would be happy to discuss any or all of these areas in more detail with you.

Large Areas

Quartermaster Harbor – In 1995, the Department evaluated the western shoreline of Quartermaster Harbor. The reports states we recommend that this area be classified as PROHIBITED due to the substantial number of on-site sewage disposal systems which are direct and indirect sources of contamination.

<u>Port Orchard</u> – In 1998, the Department finished an evaluation of the growing area. The reports states *four actual sources were located and 66 sites were listed as potential sources. The area of Crystal Springs should be excluded from the approved area and classified Prohibited...*

Port Orchard (addendum) – The Department concluded the evaluation of this shoreline in 2001. The report states although not quantified with bacterial sampling, shoreline soil conditions in association with the location, type and age of the on-site sewage systems in the area indicate a probable impact to the growing area from these systems. Excessive numbers of bacteria found in many shoreline discharges also indicate a probably impact to the growing area. The commercial harvesting of shellfish should not occur until the impact from these sources can be identified and eliminated.

<u>Bay Center</u> – 1,590 acres downgraded from Approved to Prohibited in 1989 due to rural nonpoint pollution. 1,030 acres upgraded from Prohibited to Conditionally Approved in 1992 due to improvements in shoreline conditions, specifically, 32 failing on-site sewage systems were repaired. Between 1999 and 2000, 1,030 acres were upgraded from Conditionally Approved to Approved due to improved water quality conditions.

<u>Burley Lagoon</u> – In 1981, 210 acres of commercial growing area were downgraded from Approved to Restricted. In 1993, that acreage was upgraded from Restricted to Conditionally Approved due to the repair on failing on-site sewage systems and the correction of agricultural waste problems.

<u>Eld Inlet</u> – 690 acres of growing area were downgraded from Approved to Conditionally Approved in 1980 due to rural nonpoint pollution. In 1998, 450 acres were upgraded from Conditionally Approved to Approved due to the repair of on-site sewage systems and improved farm management practices.

<u>Liberty Bay</u> – 260 acres were downgraded from Conditionally Approved to Restricted in 1991 due to rural and urban nonpoint pollution. In 1994, 70 acres in the Lemolo area were upgraded from Restricted to Approved due to the correction of on-site sewage system failures and the reevaluation of the hydrographics of the area.

<u>Hood Canal 9</u> – In 1987, 630 acres were downgraded from Approved to Prohibited based on rural nonpoint pollution impacts. 960 additional acres were downgraded in 1993 due to rural nonpoint pollution including on-site sewage system failures. In 1996, 530 acres were upgraded from Restricted to Approved due to the correction of on-site sewage system failures. 400 acres were upgraded from Prohibited to Approved in 1998 due to the repair of failing on-site sewage systems.

North Bay – In 1991, 1,260 acres of growing area were downgraded from Approved to Prohibited due to on-site sewage system failures. Between 1991 and 1992, 1,260 acres were upgraded from Prohibited to either Conditionally Approved or Restricted because of the repair of failing on-site sewage systems. Recently, a wastewater treatment plant and collection system has been constructed in this area.

North River – In 1998, 900 acres were upgraded from Prohibited to Approved due to the repair of failing on-site sewage systems within a developed community along the Willapa River. The collection system from a neighboring wastewater treatment plant was extended to this neighborhood.

<u>Port Gamble Bay</u> – 20 acres were downgraded due to rural nonpoint pollution in 1996. In 1999, those 20 acres were reclassified as Approved due to the repair of failing on-site sewage systems and implemented agricultural management practices.

Samish Bay – In 1994, 2,700 acres were downgraded from Approved to Restricted and Prohibited due to agricultural impacts and on-site sewage system failures. In 1998 and 1999, 1,150 acres were upgraded after on-site sewage systems were repaired and agricultural practices improved.

<u>Similk Bay</u> – In 2000, 60 acres were downgraded from Approved to Prohibited due to failing on-site sewage systems.

Small Areas

<u>Henderson Bay</u> – Gray water discharge to the marine shoreline. The system was inspected by the Tacoma-Pierce County Health Department and repaired by the homeowner. Harvest was closed around this site until the repair was completed.

<u>Henderson Bay</u> – "Chlorinator" system on shoreline discharging to the marine water. A 250-meter closure radius exists around this discharge point.

Oro Bay – A failing OSS was identified along the marine shoreline. The system was inspected by the Tacoma-Pierce County Health Department and repaired by the homeowner. Harvest was closed around this site until the repair was completed.

<u>Penrose Point State Park</u> – This area is currently Unclassified because the Department has not collected the required number of marine water samples. During the shoreline survey, a failing OSS was identified and the potential harvest of shellfish was closed until the repair was completed. The Tacoma-Pierce County Health Department inspected the site and owner has repaired the system.

<u>Dyes Inlet (E. Erlands Point)</u> - This area is currently Unclassified because the Department has not collected the required number of marine water samples and there are outstanding toxics issues near the shoreline. During the shoreline survey, a failing OSS was identified and the potential harvest of shellfish was closed until the repair was completed. The Kitsap County Health District inspected the site and owner has repaired the system.

<u>Hood Canal 1</u> – The Department identified high fecal coliform concentrations discharging from a 4" pipe on the shoreline. The Kitsap County Health Department traced the source to a nearby failing OSS and its cross connection to a nearby curtain drain. The repair is currently being evaluated and the Department is modeling a closure zone around the discharge.

<u>Quartermaster Harbor</u> – The Department recently identified two failing on-site sewage systems along the shoreline. The shoreline area in front of these systems is currently Unclassified and will be classified as Prohibited at the conclusion of the evaluation.

<u>Port Madison</u> – The Department identified high fecal coliform concentrations discharging from an 18" stormwater culvert near Indianola. The classification of the intertidal area around this discharge was changed from Approved to Unclassified.

<u>Eld Inlet</u> – The LHJ identified numerous failing on-site sewage systems during a mid-90's evaluation. With the exception of one system, all were repaired. The Department closed Young Cove because of this remaining failure.

<u>Nisqually Reach</u> - The LHJ identified numerous failing on-site sewage systems during a mid-90's evaluation. With the exception of one system, all were repaired. An Unclassified area is located around this site.